

## Statement of Work

Task 1: Support experiment design of pulse x-ray testing at the University of Rochester's Laboratory for Laser Energetics OMEGA facility and the Department of Energy's, National Ignition Facility (NIF). The vendor will support the pre-test planning for proposed OMEGA and NIF solar cell component and array testing. The vendor must have specific knowledge of pulsed x-ray requirements for spacecraft as defined by the Defense Threat Reduction Agency and the Missile Defense Agency. The planning will include assessment of components, assisting with the design of test support equipment, designing the test matrix, analysis of x-ray yield from laser driven targets and the transient thermal effects on materials exposed to burst x-rays.

Task 2: Support and Perform Test Execution—Provide limited on-site support to NRL at an OMEGA test proposed for September 2012 of pulse x-ray testing of solar cells.

Task 3: Post test analysis of the x-ray yield from the test and provide the cumulative and spectral x-ray yield from data collected during the tests. Document the analysis via Briefing and Report.